#### RAILROAD COMMISSION OF TEXAS

OIL AND GAS DIVISION

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JERRY W, MULLICAN
Director of Underground
Injection Control

1124 S. IH 35

CAPITOL STATION - P. O. DRAWER 12967

AUSTIN, TEXAS 78711

March 10, 1982

Mr. Ron Van Wyk
Environmental Engineer (6W-SG)
United States Environmental Protection Agency
Region VI
1201 Elm Street
Dallas, Texas 75270

Re: Letter of Clarification UIC Program Application

Dear Mr. Van Wyk:

This letter of clarification is in response to the comments you discussed with us here in Austin on March 3, 1982. I understand that your comments incorporate both those of the Region and Headquarter's staffs concerning the Commission's UIC Program Application. I trust this letter will be satisfactory to allow Region VI to make a favorable recommendation.

# COMMENT 1 - Confidential Information

Section II, Part A of the Memorandum of Agreement pertaining to sharing of information states that:

All information and records obtained or used in the administration of the Program will be available to EPA for review upon request subject to state statutes governing confidentiality (Article 6252-17a lexas Rev. Civ. Stat. Ann.). Any information obtained from the State by EPA which is subject to a claim of confidentiality will be treated by EPA in accordance with EPA regulations governing confidentiality (40 CFR Part 2).

The EPA will furnish to the Commission the information in its files which the State needs to implement the Program, subject to EPA regulations governing confidentiality (40 CFR Part 2) and Federal

provisions governing data transfer (Emphasis added).

This section was not written so as to provide either the state or the federal government with a mechanism to arbitrarily withhold information from EPA or the other party to the agreement by labeling it as confidential, but only cites existing statues and regulations binding each agency.

In any case, further detail is not appropriate since the Commission's policy

is to not keep separate records for any information submitted as confidential. Such information is either returned to the party without being admitted into the records, or is placed in the Commission's general files. Consequently, any records requested by EPA for records on file at the Commission will be honored.

# COMMENT 2 - Burden of Proof

Page 6 of the Program Description states that "Pursuant to Rules 3.9, 3.46, and 3.71, and the applicable application forms, such permits will only be approved if the applicant satisfies his burden of showing that all reasonable efforts have been made to assure the protection of fresh water."

Under the rules, statutes and application forms administered by the Railroad Commission, the applicant has the burden of showing the state that its injection activities will not endanger drinking water sources. In stating that "reasonable efforts" will have to be made, the Program Description is only indicating that the burden of proof in such cases is not an absolute standard or a beyond a reasonable-shadow-of-a-doubt standard, but rather is a preponderance-of-evidence standard typical to civil and administrative proceedings.

### COMMENT 3 - Aquifer Exemption

The case by case review of applications to dispose of oil or gas waste into a non-productive zone requires a letter from the Texas Department of Water Resources (TDWR), to assure aquifer protection. Inherent in the TDWR review of an application, is the consideration of aquifer exemption. The recommendations of the TDWR will be adhered to because that agency has the information and experience to determine if an aquifer cannot or will not in the future be a source of drinking water. Aquifer exemptions would not be granted without EPA concurrence.

The case by case review of applications to inject fluids into a productive zone that contains fresh water will require the procedure outlined on page 24 of the Program Description. The TDWR will not review injection well applications perse but the applicant must provide a TDWR letter that states the depth to which usable quality water occurs in the project area.

# COMMENT 4 - Maximum Injection Pressure

Surface injection pressure is limited to half a pound per foot  $(\frac{1}{2} \text{ lb/ft})$  of depth to the top of the disposal or injection zone. A pressure in excess of this limit will be permitted only if the applicant submits proof that fracturing of the formation will not occur. The fracture gradient is requested as item 21 on the Application to Dispose of Oil or Gas Waste (Form W-14).

# COMMENT 5 - Fresh Water Protection

In addition to log interpretations performed by the Texas Department of Water

Resources, the Commission's UIC geologists make further log reviews and interpretations in areas of fresh water aquifers such as the Wilcox Aquifer to assure that the "geological requirement of an accumulation total of 250 feet of relatively impermeable strata" (page 23 - Program Description) exists so as to prohibit disposal into 10,000 ppm or less TDS water strata.

### COMMENT 6 - Mechanical Integrity Testing

Wells that are proposed to be converted to injection or disposal may have questionable integrity regarding the sufficiency of surface casing depth, and the adequacy of cement to protect the fresh water aquifers and confine the injected fluids to the intended zone. Any doubt as to integrity of these factors will require that the applicant provide a cement bond log demonstrating adequate cementing or perform a cement squeeze operation. Mechanical integrity testing requirements beyond those which will be required of all wells may be added to the permit. Such requirements may be annual annulus pressure tests, fluid flow surveys, radioactive tracer surveys, or casing inspection surveys.

The mechanical integrity testing requirements for hydrocarbon storage wells will be as stringent and equally effective as pressure tests. The Regional Administrator will be advised of and given the opportunity to comment on any alternate mechanical integrity tests.

The Commission's District inspectors will witness field mechanical integrity testing on a high priority basis; however, the actual percentage will depend upon available resources and work load.

# COMMENT 7 - Review of Existing Wells

The Railroad Commission routinely reviews compliance with permit conditions. Under the proposed underground injection control program, a major part of the review of existing permits will occur as a result of injection wells which fail the mechanical integrity test so as to be subject to immediate formal review. Further review of existing injection wells will occur during routine field inspections and citizen complaint investigations, as well as as a result of annual monitoring report reviews. It is anticipated that the combinations of the above activities will identify any wells which represent a threat to underground drinking water within five years of program approval.

## COMMENT 8 - Public Participation

On page 25 of the Program Description, there is a statement that "interested parties" will be sent copies of the examiner's proposed decision. The use of the words "interested parties" was meant to indicate that persons who attended the hearing or otherwise expressed an interest in the application would be mailed a copy of the proposed decision. This is part of the Railroad Commission's policy to respond to any comments regarding any application, hearing, or permit administered by the Commission.

#### COMMENT 9 - Notice

On Page 15 of the Program Description, it is stated that notice of <u>every</u> injection well application must be published in a newspaper of general circulation. If a hearing is requested or otherwise called, <u>personal</u> notice of the hearing will be mailed to each person who expressed an interest in the application.

This method assures greater public participation than that delineated in the Program Guidance Regulations. There, published notice of the <u>application</u> is not even required. If a hearing is nevertheless called, only then must published notice occur so as to give persons an opportunity to participate in the administrative process. The Commission's procedures are preferable in that they require broad notice earlier in the application process and provide personal notice to persons actually expressing any interest in the application.

# COMMENT 10 - Annual Report

Regarding Section II, Part B of the Memorandum of Agreement pertaining to Annual Reporting, is is understood that the specific contents and format of the annual program report will be worked out with EPA at the beginning of each fiscal year as part of the program grant. Substantive changes during the fiscal year must have the concurrence of the State.

We appreciate your support and assistance.

Sincerely yours,

Jerry W. Mullican Director of Underground Injection Control